

APPENDIX C
Preliminary Assessment of
SSO Discharges from the Inline Storage System (ISS)
1994¹ through 2000²

Date SSO Event Started ³	No. of locations with SSO	Prelim. Ass'mt. (See expl'n. below)	SSO/CSO volume disch'rged (million gallons)	Volume captured by ISS (million gallons)	Approx. % of service area with >5 year storm	Approx. % of service area with >1980 MFP design storm	Event Duration (hrs)	Most/least intense storm frequency observed	Most/least rainfall observed (inches)	Approx. average rainfall In Serv. Area
95 Aug 27	13	A	62/773	837	20%	0	36	>10/<1	4.28/0.36	2.5
96 Jun 16	16	A	68/648	811	25%	0	18	>5/<1	4.09/1.76	3+
97 Jun 20	22	B	203/1600	657	100%	75%	36	>100/>5	8.11/4.00	6+
97 Jul 2	11	C	45/838	1300	20%	10%	1	>10/>2	5.80/2.08	3+
98 Aug 5	17	B	79/475	844	75%	50%	12	>100/<1	8.92/0.89	5+
99 Apr 8	14	A	49/645	667	10%	0	12	>10/<1	3.79/1.44	2.5
99 Apr 21	18	A	75/710	692	0	0	36	>2/<1	3.32/2.10	3.0
99 Jun 12	15	A	84/911	904	33%	0	18	>10/<1	4.18/1.77	2.7
99 Jul 21	19	C	62/1126	790	50%	10%	3	>50/<1	3.79/0.58	2.0
00 May 17	13	A	110/1539	690	50%	0	24	>25/<1	4.71/2.47	3.5
00 Jul 2	5	C	5/792	690	50%	10%	6	>100/<2	4.68/0.77	3.0
00 Aug 5	5	A	2/127	481	5%	0	6	>10/>1	2.93/1.41	2.2
00 Sep 11	8	A	21/838	825	10%	0	12	>10/<1	3.48/1.38	2.5

Explanation of the letters in the third column:

- A. The preliminary assessment of the SSOs resulting from this event indicates that they were not authorized by MMSD's permit. More analysis of this event will be required to verify that conclusion.
- B. All of these SSOs were authorized by MMSD's permit due to the intensity of this storm, the amount of rainfall and the area of coverage.
- C. Some or all of the SSOs during this event may have been authorized by MMSD's permit because portions of MMSD's service area experienced an event equivalent to or more severe than the design storm used in the MFP. More analyses will be required to determine the location of the overflows authorized and not authorized by the permit during this event. The MFP "design storm" assumed uniform distribution of a rainfall event with the following characterization: total precipitation (ppt.) after 1 hour

¹ MMSD did not report any SSOs in 1994. However, there was one CSO event in February 1994.

² There were CSO events on the following dates (with SSO being reported at locations unrelated to the ISS being filled to capacity): 98 Nov 9, 99 Jan 21, 99 Sep 26, 00 May 30, & 01 Feb 8.

³ See Appendix C for a summary of the storm characteristics associated with this SSO event.

= 1.2 inches, ppt. after 6 hours = 3.2in., ppt. after 12 hours = 3.9 in., ppt. after 24 hours = 4.7 in., and ppt. after 36 hours = 5.3 in. The 5-year storm in the MMSD service area has the following characteristics: ppt. after 1 hr = 1.7", ppt. after 6 hrs = 2.3", ppt. after 12 hrs= 2.6', ppt. after 24hrs = 3.1", ppt. after 36 hrs = 3.4" .